

Weighted E Method
LOT 8A RAYNOLDS ADDITION

Existing Developed Basins									
Basin	Area (sf)	Area (acres)	Treatment A %	Treatment B (acres)	Treatment C %	Treatment D (acres)	Treatment E %	100-Year, 6-hr. Weighted E (ac-ft)	Volume (ac-ft)
EXISTING	4970	0.114	0%	0	100.0%	0.114	0.0%	0.000	0.780
PROPOSED	4970	0.114	0%	0	33.0%	0.038	15.0%	0.01711	0.059
IMPERVIOUS TO TRENCH	1740	0.040	0%	0	0.0%	0.000	0.0%	0	100%
DISCHARGE LESS HARVEST	3230	0.074	0	51.2%	0.038	23.1%	0.01711	26%	0.019
ALLOWABLE DISCHARGE									0.23
Equations:									0.31

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)
Volume = Weighted D * Total Area
Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad
Where for 100-year, 6-hour storm (zone 2)
Ea= 0.53
Eb= 0.78
Ec= 1.13
Ed= 2.12
Qa= 1.57
Qb= 2.28
Qc= 3.14
Qd= 4.7
FIRST FLUSH VOLUME= 73 CF
VOLUME 315 CF
VOLUME GENERATED FROM IMPERVIOUS CONTRIBUTING TO TRENCH 307.4 CF

BIO-SWALE-HARVEST VOLUM AREA OF PIPE(18" DIA) 1.77
AREA OF GRANULAR FILL 3.28F 30% VOID=0.97CF/LF
LENGTH=115' 315.1 CUBIC FEET
1.77 CF/LF
315.1 CUBIC FEET

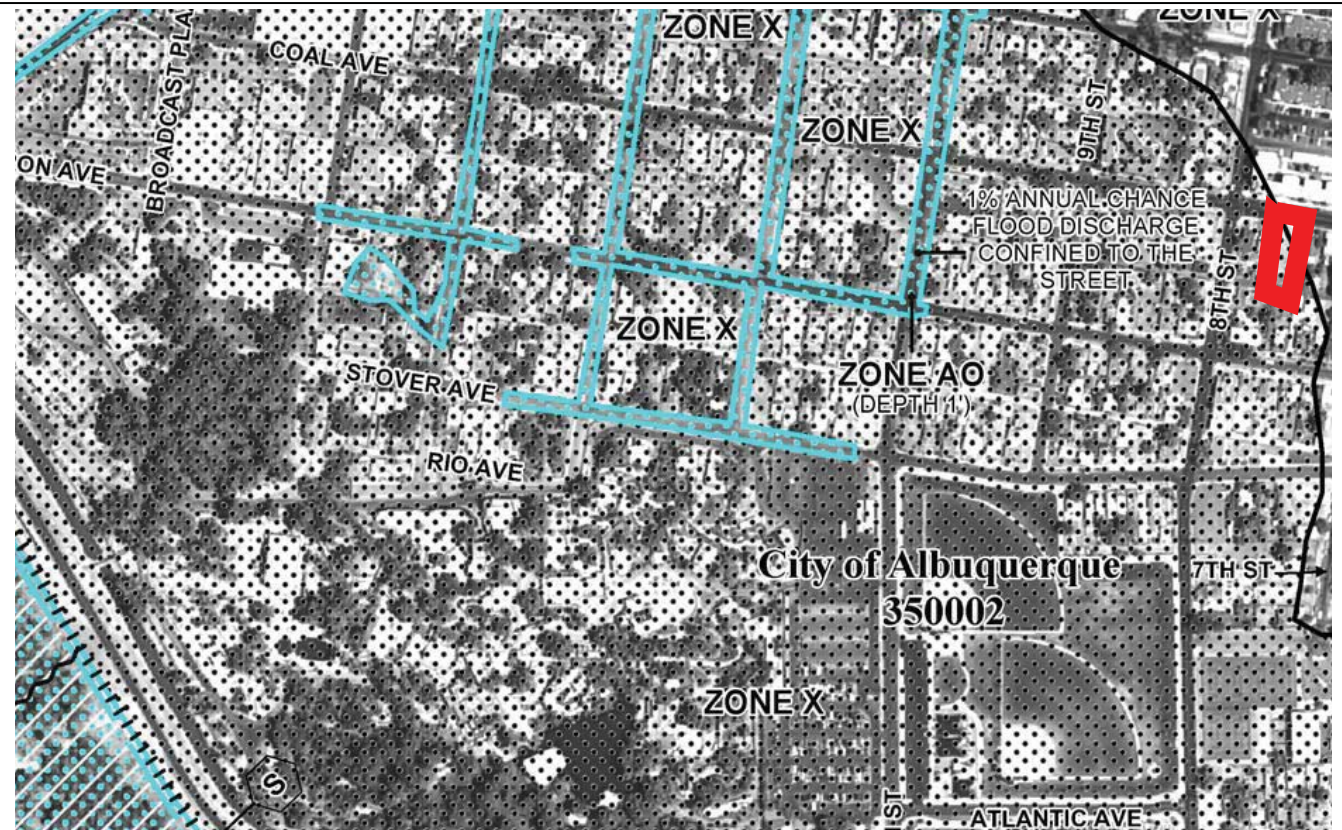
NARRATIVE
THIS IS A REDEVELOPMENT OF AN INFILL LOT. THIS LOT WAS FULLY DEVELOPED IN THE PAST. WE ARE PROPOSING A BIOSWALE/HARVEST TRENCH TO RETAIN THE FLOW GE FROM THE ROOF AND IMPERVIOUS AREA AROUND HOUSE. THE REMAINING SITE WILL FREE DISCHARGE AT .23CFS WHICH IS LESS THAN THE .31 CFS ALLOWED (2.75CFS PER

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.



VICINITY MAP:



FIRM MAP:

LEGAL DESCRIPTION:

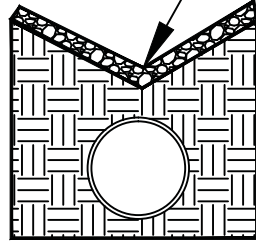
LOT 8-A RAYNOLDS ADDITION

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. TOPOGRAPHY AND SURVEY DATA SHOWN ON THIS PLAN WAS OBTAINED BY CONSTRUCTION SURVEY TECHNOLOGIES, DAVID P ACOSTA PLS 21082 MAY 2015

LEGEND

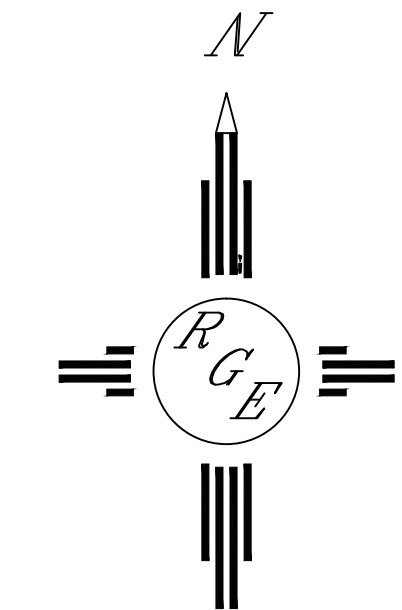
- 5411--- EXISTING CONTOUR
- 5410--- EXISTING INDEX CONTOUR
- 5411--- PROPOSED CONTOUR
- 5410--- PROPOSED INDEX CONTOUR
- EXISTMH CMU WALL
- SWALE-FLOWLINE



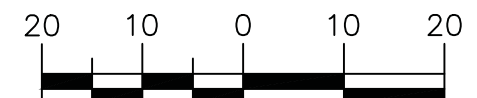
BIO SWALE/
WATER HARVEST GALLERY

30" WIDE X 2' DEEP TRENCH FILLED WITH CRUSHED ANGULAR rock 3/4-2" average size, install 18" hdpe perforated pipe. trench lined with filter fabric all sides

ACS CONTROL STATION
G K13
N 1485023.666
E 1515142.466
Z 4959.622
NAD 1983
NAVD 1988
NEW MEXICO STATE PLANE
CENTRAL ZONE
G-G= 0.999685
DELTA-ALPHA= -00°14'26.38"



GRAPHIC SCALE



SCALE: 1"=10'

ENGINEER'S SEAL	LOT 8-A RAYNOLD ADDITION	DRAWN BY JDG
DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 14522	GRADING AND DRAINAGE PLAN	DATE 05-20-2015
5/27/15	Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0989	SHEET # 1 OF 1
DAVID SOULE P.E. #14522		JOB #

CITY OF ALBUQUERQUE



July 28, 2015

David Soule, P.E.
Rio Grande Engineering
PO Box 93924
Albuquerque, New Mexico 87199

RE: **Coal Townhomes**
714 Coal Lots 7A & 8A
Grading and Drainage Plan
Engineers Stamp Date 7/6/15 (K13D073)

Dear Mr. Soule,

Based upon the information provided in your submittal received 7/7/15, this plan is approved for Grading Permit and Building Permit.

Please attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

If you have any questions, please contact me at 924-3999 or Rudy Rael at 924-3977.

Sincerely,

Shahab Biazar, P.E.
City Engineer, Albuquerque
Planning Department

RR/SB
C: File